

Max's Market Stall: A Ratio Challenge

Learning objective: To understand and solve problems involving simple ratio and proportion.

Read the story about Max the monkey's fruit stall at the forest market. Use the information provided to answer the questions below. Remember to show your working out.

Max the monkey has opened a fruit stall at the forest market to help his friends eat healthily. Max is very careful about how he packs his fruit boxes. He knows that for every 2 red apples he packs, he must include 3 green pears to keep the balance just right. This is his special ratio of 2:3. One sunny morning, Max decided to make up some special gift bags. For every 1 bunch of bananas, he adds 4 juicy oranges. If Max uses 3 bunches of bananas, he knows he must use 12 oranges. Max also sells berry punnets. He sells them in a ratio of 5 strawberries to 2 blueberries. If a customer wants a large punnet with 10 strawberries, Max knows he must add 4 blueberries to keep the proportion perfect.

Word bank: ratio · proportion · quantity · equivalent · share

1. Max is packing a box of apples and pears using his 2:3 ratio. If he uses 4 red apples, how many green pears does he need to include? (2 marks)

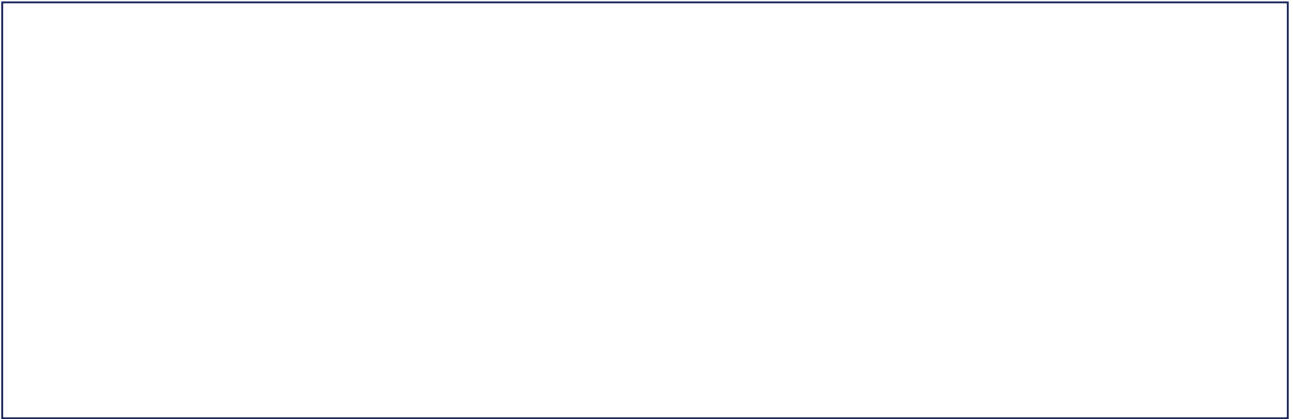
2. Using the banana and orange ratio (1:4), how many oranges would Max need if he had 5 bunches of bananas? (2 marks)

3. Max sells a small punnet with 5 strawberries and 2 blueberries. If a customer buys a punnet with 15 strawberries, how many blueberries are in the punnet? (2 marks)

4. If Max has 6 red apples, how many green pears does he need to keep his 2:3 ratio? (2 marks)

5. Explain in your own words why Max uses ratios when he packs his fruit boxes. (2 marks)

Draw: Draw a picture of one of Max's fruit baskets. Show 2 apples and 3 pears inside to demonstrate the 2:3 ratio, and label them clearly.



Extension challenge: Max wants to create a 'Fruit Salad Mix' with a ratio of 3 grapes to 1 slice of melon. If he uses 12 grapes, how many slices of melon does he need? What if he wants to use 5 slices of melon, how many grapes would he need then?